| Rejected   - (Through numeral)  |       |           |          |                 |                 |           |         |        |            |                              |         |          |          | <u> </u>                   | <u>.</u>     |                |             |             |                 |          |          |          |          | • :    | <del></del>     |          |         |                 |           |   |
|---|-------|-----------|----------|-----------------|-----------------|-----------|---------|--------|------------|------------------------------|---------|----------|----------|----------------------------|--------------|----------------|-------------|-------------|-----------------|----------|----------|----------|----------|--------|-----------------|----------|---------|-----------------|-----------|---|
| Claim   |       | 1         | Rejected |                 |                 |           |         | -[     | (Т         | hrough numeral)<br>Cancelled |         |          |          |                            |              |                | N           | Non-Elected |                 |          |          | A        | Appeal   |        |                 |          |         |                 |           |   |
| Eu     Eu<  |       | =         | Allowed  |                 |                 |           |         | ÷      | Restricted |                              |         |          |          |                            |              | I Interference |             |             |                 |          |          | 0        | Objected |        |                 |          |         |                 |           |   |
| Eu     Eu<  | Claim | Г         |          |                 | Date            | -         | -       | ٦      | Claim      |                              |         |          |          |                            |              | Data           |             |             | ר               |          |          | _        | D-4-     |        |                 |          |         | 1               |           |   |
| 10  |       | П         | T        | Т               | T               | П         | Т       | $\top$ | 1          |                              |         |          |          |                            | Jace         |                | <del></del> |             |                 | -        | т-       | Date     |          |        | т-              | 1        | 1       |                 |           |   |
| Solution   Solution | Final |           |          |                 |                 |           |         |        |            | Final                        | Orlgina |          |          |                            |              |                |             |             |                 |          | Finat    | Original |          |        |                 |          |         |                 |           |   |
| 2   |       |           | $\top$   | 十               | П               |           | 十       | +      | 1          |                              | 51      | Н        |          | Н                          | $\dashv$     | $\dashv$       | $\dashv$    | +           | ╁               | 1 1      |          |          | $\vdash$ | +      | ╫               | Н        | +       | +               |           |   |
| 4   |       | П         | $\perp$  | L               | П               |           | $\Box$  | I      | ] ]        |                              | 52      |          |          |                            |              |                |             |             |                 | ]        |          | 102      |          |        |                 |          | _       | $\top$          |           |   |
| 5   |       | Н         | $\dashv$ | +               | Н               | $\dashv$  | +       | +      | -          |                              |         | -        | _        | $\stackrel{\cdot}{\vdash}$ |              | -              | 4           | 4           | +               | <b>↓</b> |          |          |          | Ţ      |                 | П        | 1       | T               |           |   |
| 6   |       | Н         | +        | +               | Н               | $\dashv$  | +       | ╅      | 1          |                              |         | Н        |          | $\dashv$                   | ᅥ            | ᅱ              | +           | ┿           | ╁               | -        |          |          | H        | ┿      | +-              | $\vdash$ | +       | ╀               |           |   |
| B   |       |           |          | T               |                 |           |         |        | ] [        |                              | 56      |          |          |                            |              |                |             |             |                 | 1        |          |          | $\vdash$ | +      | +               | H        | ┪       | +-              | ┢         |   |
| 9   |       | Н         | +        | ╀-              | Н               | _         | 4       | $\bot$ | 1 1        |                              | 57      | Ш        |          |                            |              |                | $\Box$      | $\Box$      | L               | ]        |          | 107      |          | 工      |                 |          |         | 工               |           |   |
| 10  |       | Н         | +        | ╁               | H               | $\dashv$  | +       | +      | ╢          |                              |         | $\vdash$ | $\dashv$ | $\dashv$                   | $\dashv$     | -              | +           | +           | +-              | - 1      |          |          | $\dashv$ | +      | $\vdash$        | $\vdash$ | -       | ╀               | Щ         |   |
| 11  |       |           | $\top$   | 1               |                 | $\exists$ | 寸       | +      | 1          |                              |         | Н        | ٦        | $\dashv$                   | $\dashv$     | ┪              | $\dashv$    | +           | ╁╌              | 1 }      |          |          | -        | +      | $\vdash$        | $\vdash$ | +       | ╁               | H         |   |
| 13  |       |           |          |                 |                 | $\Box$    |         |        | ] [        |                              | 61      |          |          |                            |              |                | I           |             | T               | 1 (      |          | 111      |          |        |                 |          | +       | 1               | Н         |   |
| 14  | 12    | $\vdash$  |          | ╀               | Н               |           |         | ∔      | ┨          |                              |         | -        | _        | 4                          | 4            | _              | 4           | $\perp$     | $\bot$          | ] [      | $\Box$   |          | $\Box$   | I      |                 |          |         | I               |           |   |
| 15  |       | $\dashv$  | ┿        | $\vdash$        | H               | -         | +       | ╁      | ┨╏         |                              |         | $\vdash$ | $\dashv$ | -                          | -            | +              | +           | +           | ╁               | 1 1      |          |          | -        | +      | Н               | +        | +       | +               | Ш         |   |
| 16  | 15    |           |          |                 |                 | コ         |         |        | 1          |                              | 65      | $\dashv$ | ┪        | 7                          | $\dashv$     | +              | $\dashv$    | +           | $\dagger$       | 1 1      | $\dashv$ |          | +        | +      | Н               | -        | +       | +               | Н         | I |
| 18  |       | $\Box$    | $\perp$  | $oxed{\Box}$    | Ш               | $\dashv$  | $\perp$ | L      | ] [        |                              |         |          |          |                            | $\Box$       |                | $\Box$      | $\perp$     |                 | 1 1      |          | 116      |          |        |                 |          | I       |                 |           |   |
| 19  |       | $\dashv$  | +        | ╀               | Н               | ┥         | +       | ╁      | ┨╏         |                              |         | $\dashv$ | -        | $\dashv$                   | $\dashv$     | $\dashv$       | 4           | +           | +               |          |          | 117      |          | $\bot$ | Ш               | $\dashv$ | _ _     |                 | Ц         |   |
| 120   |       | $\dashv$  | $\top$   | $\vdash$        | Н               | $\dashv$  | +       | +      | 1          | $\neg$                       |         | $\dashv$ | +        | +                          | $\dashv$     | +              | +           | +           | ╁               | 1 1      | $\dashv$ |          | +        | ╫      | H               | -        |         | ╁               | Н         |   |
| 122   |       | $\Box$    |          |                 |                 | $\Box$    |         |        |            |                              | 70      |          | $\Box$   |                            |              |                |             | 土           |                 | ] [      |          | 120      | $\Box$   | $\top$ |                 |          | $\top$  |                 | Н         |   |
| 123   |       | -         |          | H               | H               | $\dashv$  | +       | +-     | <b> </b>   |                              |         | $\dashv$ | 4        | 4                          | 4            | 4              | +           | +           | ╄               | 1        |          | 121      |          | _      |                 | $\perp$  | $\perp$ | $\perp$         | $\Box$    |   |
| 24   124   124   124   125   125   125   125   125   125   125   125   126   127   127   127   127   127   127   128   128   128   128   128   128   128   128   129   129   129   129   130   130   130   130   130   130   131   130   130   131   131   130   131   131   131   132   133   133   133   133   133   133   133   133   133   133   133   133   134   134   134   135   135   135   135   135   136   137   137   138   138   138   138   138   138   139   139   139   139   139   139   139   140   141   141   141   141   142   142   143   144   144   144   144   144   144   144   144   145   145   146   146   147   148   148   14   |       | $\dashv$  | +        |                 |                 | -         | ╅       | ╫      | 1 1        | -1                           |         | $\dashv$ | ┪        | ┥                          | +            | +              | +           | +           | ╁╾              | 1        | $\dashv$ | 122      | +        | +      | Н               | -        | +       | ╁               | $\vdash$  |   |
| 25     26     76     125     126     127     127     127     127     127     127     127     128     128     128     128     128     128     128     128     128     129     129     129     130     130     131     131     131     131     131     131     131     131     131     131     132     133  | 24    |           |          |                 |                 |           | 1       | 1      | lt         |                              |         |          | _        | +                          | 7            | $\dagger$      | Ť           | +           | T               | 1        |          | 124      | +        | ╈      | H               | +        | +       | +               | $\dashv$  |   |
| 27   127     28   78     29   128     30   80     31   81     32   83     33   83     34   84     35   85     36   85     37   88     38   133     39   88     40   90     41   91     42   92     43   94     44   95     45   96     46   96     47   98     49   99  | 25    |           | $\perp$  | _               | П               | _         | $\perp$ | L      |            |                              |         | $\Box$   | $\Box$   | $\Box$                     | $\Box$       | $\Box$         | 1           | T           |                 |          |          | 125      |          |        |                 |          |         |                 |           |   |
| 28   78   128     29   129     30   80   130     31   80   130     32   81   131     33   82   132     34   84   133     35   85   135     36   85   136     37   88   136     33   88   138     39   88   138     40   90   140     41   91   141     42   92   142     43   93   143     44   95   145     45   96   146     47   98   148     49   99   149  | 26    | $\dashv$  | -        | ╌               | $\vdash$        | $\dashv$  | +       | +      | <b> </b>   |                              |         | $\dashv$ | $\dashv$ | $\dashv$                   | +            | 4              | +           | +           | ┼               | 1 }      |          | 126      | - -      | +      | $\sqcup$        | 4        | 1       | $\perp$         | $\Box$    |   |
| 29 79   30 81   31 81   32 82   33 133   34 84   35 85   36 86   37 88   39 88   39 89   40 91   41 91   42 93   43 94   44 94   48 98   49 99  |       | +         | +-       |                 | ╁               | $\dashv$  | 十       | ┿      | l l        |                              |         | +        | +        | $\dashv$                   | ┪            | +              | +           | +           | ╁╴              | <b>{</b> |          | 128      | +        | +      | H               |          | +       | +               | $\dashv$  |   |
| 31   81   131   132     33   133   133   133     34   84   133   133     35   85   133   134     36   85   135   136     37   87   137   137     38   88   138   138     39   90   140   140     41   91   140   141     42   92   142   142     43   93   143   144     44   94   94   144     45   96   146   145     46   96   146   147     48   98   148   148     49   99   149   149   | 29    |           |          |                 |                 | コ         |         | 工      | [ [        |                              | 79      |          | ╛        |                            |              | I              | 1           |             |                 | lt       | $\cdot$  | 129      |          |        |                 | 士        | 十       | $\top$          |           | • |
| 32   33   34   35   34   35   34   35   36   35   36   37   36   37   38   37   38   38   38   39 <td< td=""><td>30</td><td>-</td><td></td><td> _</td><td><math>\vdash \vdash</math></td><td><math>\dashv</math></td><td>4</td><td>╀-</td><td> </td><td></td><td></td><td>4</td><td>4</td><td>4</td><td>4</td><td></td><td>1</td><td><math>\perp</math></td><td>1</td><td>   </td><td></td><td>130</td><td>4</td><td><math>\bot</math></td><td></td><td><math>\Box</math></td><td>Ţ</td><td>П</td><td></td><td>•</td></td<>   | 30    | -         |          | _               | $\vdash \vdash$ | $\dashv$  | 4       | ╀-     |            |                              |         | 4        | 4        | 4                          | 4            |                | 1           | $\perp$     | 1               |          |          | 130      | 4        | $\bot$ |                 | $\Box$   | Ţ       | П               |           | • |
| 33   34   35   34   35   36   35   36   36   36   37   38   37   38   39 <td< td=""><td></td><td>-</td><td>╁</td><td><math>\vdash</math></td><td>H</td><td><math>\dashv</math></td><td>+</td><td>╁</td><td>l</td><td></td><td></td><td>┰</td><td><math>\dashv</math></td><td><math>\dashv</math></td><td>+</td><td>+</td><td>+</td><td>+</td><td>╁╌</td><td><b>!</b></td><td></td><td>131</td><td>+</td><td>+</td><td><math>\vdash</math></td><td>+</td><td>┿</td><td>+</td><td>-</td><td></td></td<>  |       | -         | ╁        | $\vdash$        | H               | $\dashv$  | +       | ╁      | l          |                              |         | ┰        | $\dashv$ | $\dashv$                   | +            | +              | +           | +           | ╁╌              | <b>!</b> |          | 131      | +        | +      | $\vdash$        | +        | ┿       | +               | -         |   |
| 35 36   37 38   39 88   40 90   41 91   42 92   43 93   44 94   45 96   46 96   47 98   48 99   135 136   137 137   138 138   139 140   140 141   141 141   142 142   143 143   144 144   145 146   147 147   148 99   148 149  | 33    | $\exists$ |          |                 | $\Box$          | 士         | 士       |        |            |                              | 83      | 寸        |          |                            | 1            | 7              | +           | $\perp$     | $\vdash$        | ·        |          | 133      | $\top$   | +      | H               | 十        | +       | H               | $\dashv$  |   |
| 36   37   38   37   38   39   38   39   38   39 <td< td=""><td>34</td><td>_</td><td></td><td>Ш</td><td></td><td>4</td><td></td><td>-</td><td>   </td><td>-</td><td></td><td>_</td><td><math>\perp</math></td><td><math>\Box</math></td><td>1</td><td><math>\perp</math></td><td>Ţ</td><td><math>\perp</math></td><td>L</td><td>] [</td><td></td><td></td><td>Ţ</td><td><math>\bot</math></td><td></td><td><math>\Box</math></td><td></td><td></td><td><math>\Box</math></td><td></td></td<>   | 34    | _         |          | Ш               |                 | 4         |         | -      |            | -                            |         | _        | $\perp$  | $\Box$                     | 1            | $\perp$        | Ţ           | $\perp$     | L               | ] [      |          |          | Ţ        | $\bot$ |                 | $\Box$   |         |                 | $\Box$    |   |
| 37   887   137     38   138   138     39   90   140     41   91   140     42   92   142     43   94   144     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |       | +         | ╌┼╴      | Н               |                 | +         | +       | ╀      | ╽┟         | $\dashv$                     |         | $\dashv$ | +        | $\dashv$                   | +            | +              | +           | +           | $\vdash$        |          |          |          | +        |        | $\vdash \vdash$ |          | +-      | +               | $\dashv$  | • |
| 38 88   39 138   40 90   41 91   42 92   43 94   44 94   45 95   46 96   47 97   48 98   49 99  | 37    | $\dashv$  | 十        | П               | $\top$          | $\top$    | $\top$  | T      | h          | -+                           | 87      | +        | +        | $\dashv$                   | $\dagger$    | +              | $^{+}$      | +           | $\vdash$        |          |          | 137      | +        | +      | Н               | ╅        | ╁       | +               | ᅱ         |   |
| 40 90   41 91   42 92   43 93   44 93   45 95   46 96   47 97   48 98   49 99   140   141   142   143   144   145   146   147   148   149   |       | $\Box$    |          |                 |                 | $\Box$    |         |        |            |                              |         |          |          |                            |              | I              | I           |             |                 |          |          | 138      |          |        |                 | 土        | 工       |                 |           |   |
| 41 91   42 92   43 93   44 93   45 95   46 96   47 97   48 98   49 99   141 142   143 143   144 144   145 145   146 146   147 147   148 148   149 149   |       | -         | - -      | Н               |                 | -         | - -     | +      | -          |                              |         | -        | 4        | 4                          | 4            | 4              | +           | 4           | $\vdash$        | -        |          |          | 4        | 4      | $\square$       |          | 1       | $\Box$          | $\Box$    |   |
| 42 92   43 93   44 93   45 94   46 95   47 96   48 98   49 99   |       | 十         | +-       | Н               | +               | ╅         | +       | +-     | <b> -</b>  |                              |         | +        | +        | $\dashv$                   | +            | +              | +           | ╫           | Н               | <br> -   |          |          | +        | +-     | $\vdash$        | ┽        | +-      | ╁┤              | $\dashv$  | • |
| 44 94   45 95   46 96   47 97   48 98   49 99   | 42    | 士         |          |                 | <del>ー</del>    | 士         |         |        | Ĺ          |                              | 92      |          |          | 士                          | 1            |                | $\pm$       |             |                 |          |          | 142      |          |        | H               | $\dashv$ | +       | H               | $\dashv$  |   |
| 45 95   46 96   47 97   48 98   49 99   |       | 4         | <u> </u> |                 | 4               | 4         |         | Ш      | L          |                              |         | $\dashv$ | $\perp$  | $\Box$                     | $\downarrow$ | Ţ              | I           |             |                 | F        |          |          |          |        |                 | $\Box$   |         |                 |           |   |
| 46 96   47 97   48 98   49 99   |       | +         | +        | $\vdash \vdash$ | $\dashv$        | +         | +       | +      | <b> </b> - |                              |         | +        | +        | +                          | +            | +              | +           | +           | $\vdash \vdash$ | -        |          |          | +        | +      | $\dashv$        | -        | +       | $\vdash$        | $\dashv$  |   |
| 47  | 46    | $\perp$   |          | $\Box$          | $\perp$         | +         |         |        | F          |                              | 96      | +        | +        | +                          | +            | +              | +           | +           | H               | <b> </b> | $\dashv$ | 146      | +        | +      | +               | +        | +-      | + +             | $\dashv$  |   |
| 49 99 149   |       | T         | $\Box$   | $\square$       | $\perp$         | Ţ         | I       | П      |            |                              | 97      | $\perp$  | $\perp$  |                            | $\perp$      |                | I           | I           |                 |          |          | 147      | 工        |        |                 | 士        | 工       |                 | $\exists$ |   |
|   |       | +         | +        | Н               | +               | +         | +-      | H      | -          |                              |         | +        | +        | +                          | +            | +              | +           | -           | $\vdash \vdash$ |          |          |          | $\bot$   | +      | $\bot$          | _        | 丰       | $\prod$         | _]        |   |
|   |       | +         | +        | H               | $\dashv$        | +         | +       | +      | -          |                              |         | +        | +        | +                          | +            | +              | +           | +           | Н               | +        |          |          | +        | ╂╾┨    | +               |          | +       | $\vdash \vdash$ | $\dashv$  |   |
|   |       |           |          |                 |                 |           |         |        |            |                              |         |          |          |                            |              |                |             |             |                 | ٠.       |          |          |          |        |                 |          |         |                 |           |   |

Application/Control No.

Index of Claims

Applicant(s)/Patent under Reexamination

**Art Unit**